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Chilton's Food Engineering

In this issue: ENGINEERED FOODS

THE CYCLAMATE BAN... WAS JUSTICE BLIND?

SPECIAL REPORT

Banned in 1970, edging toward a reclearance in 1986, will cyclamate get a new lease on life? Will it matter now?

CAPITAL SPENDING

We track the most active companies in capital spending, detect investment trends.

MEGA – MERGER

Philip Morris' $5.8 billion acquisition of General Foods creates a new #1 in the food industry.

Chilton's Food Engineering

ABOUT THE COVER

Were the scales of justice evenly balanced when cyclamate was banned in 1970? Some people think not and would like to see the sweetener approved for use in food and beverage products. Our cover story explores the industry's newest 'hot potato'.

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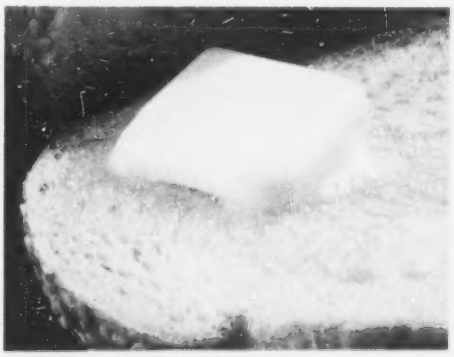

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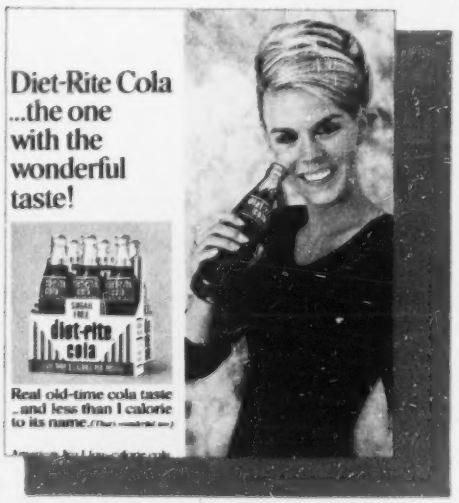

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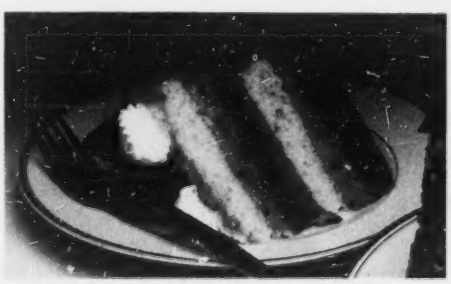

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Special Emphasis

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LOOKING AHEAD . . .
by Dr. A. Elizabeth Sloan

'Boomers'

Baby boomers—that mega generation of 76.4 million—have affected every aspect of American society throughout three decades. Landon Y. Jones, author of *Great Expectations: America and the Baby Boom Generation*, has observed that in the 1950s the baby boomers gave us burgeoning suburbs and crowded elementary schools, in the 1960s they gave us rock 'n roll, fast foods, high crime, and unemployment, and in the 1970s they gave us swinging singles, working women, and rising housing prices.

Now the baby boomers are finally settling down to the business of having babies themselves, giving us an expanding children's market. And, as usual, the boomers are doing things in their own way, creating a new type of parent—one who expects more, knows more, and can spend more than the parent of previous generations.

The echo boom

The new baby boomlet, which demographers are calling the "echo effect" of the first baby boom, produced 3.70 million babies in 1982. Although that birth rate falls short of the 4.3 million babies born during the peak baby boom year of 1957, it is up considerably from the low of 3 million births in 1975. And studies of birth and marriage statistics project that the number of births should continue to rise slightly, peak in 1988, and then level off.

This means that food products for infants and children should experience a boomlet of their own. Not only baby foods, but traditional children's products, such as cookies, peanut butter, potato chips, ice cream, candy, and cold cereal, should be able to do well in the growing children's market.

However, these products must be tailored to meet the needs and expectations of the "new parent" in order to succeed.

The new parent

Baby boom mothers are having their children at a later age. The most dramatic increase in birth rate has occurred in the 30 to 34 year old group, in which first births tripled to 137,000 in 1982 from 42,000 in 1970. Between 1981 and 1982, first-birth rate increased by 18% for women aged 35 to 39. These older women have more education, are in a better financial position, and have more money to spend on their children than women who start their families earlier.

It is also significant that these births are first births. From 1981 through 1985, first births will account for 43% of *all* births, and Gerber estimates that parents and grandparents spend ten times more on first-born children than they do on subsequent children.

In addition, demographers expect that the new parent will have fewer children. With the fertility rate remaining fairly constant at 1.8, predictions are that families will remain small. Thus, the "echo boom" children will have a larger piece of the family income, a larger share of their parent's time, and a larger share of their parent's concern.

What these statistics imply is that the new parents will want high-quality, convenient food products for their children and they will be willing and able to pay a higher price for such products.

As Steven B. Most, vice president of marketing for Beech-Nut stated in an interview with *Adweek*, "There is a tremendously educated segment of the market out there who wants only the best for their baby."

Beech-Nut has introduced its new baby food product, *Stages*, as a premium brand which costs up to five cents more than the Gerber brand. Beech-Nut's promotion for its new line emphasizes that the product contains "no added sweeteners, modified starch fillers, MSG, artificial flavors, or artificial colorings."

Problem ingredients

Our *Good Housekeeping* research shows that today's parents are not only concerned about problem ingredients in infant food, they are concerned about such ingredients in their older children's diets as well.

In December 1983, we conducted in-home, personal interviews in 20 cities with 200 mothers of children up to 12 years old. Three-fourths said that they are concerned about the nutrition in their children's main meals and snacks. From 75% to 95% said that they are very or somewhat concerned about the amount of salt, sugar, caffeine, and saturated fats their children eat, and from 57% to 73% said that they are limiting a "great deal" or "some" of their children's consumption of these ingredients.

Almost 80% said that they restrict their children's consumption of snack chips, saying that snack chips have "too much salt," they have "too many preservatives/junk," or "I prefer they eat nutritious food."

However, it is difficult to determine what these mothers mean by "limiting." When we asked how often their children eat certain snack items containing sugar or salt, 67.5% said that their children eat cookies every day or a few times a week,

How mothers are limiting their children's intake of selected food ingredients

	PERCENT OF WOMEN LIMITING INTAKE:				
	GREAT DEAL	SOME	LITTLE	NONE AT ALL	DON'T USE
Sugar	39.0%	33.0%	14.0%	11.0%	2.5%
Salt	38.0	35.5	7.5	15.5	3.0
Caffeine	37.5	28.0	11.0	11.5	11.5
Saccharin	37.5	19.5	9.5	9.0	24.5
Saturated Fats	19.5	37.5	14.5	26.0	2.0
Cholesterol	16.5	37.5	15.5	28.0	2.0
Nutrasweet	16.5	15.5	14.5	30.0	23.5
Calories	8.5	28.5	16.0	46.0	.5

and 50.5%, 40.5%, and 33.5% said that their children eat candy, ice cream, and potato chips, respectively, either every day or a few times a week.

Healthy foods

It does appear, however, that mothers equate "fresh" and "natural" with "healthy" and that they therefore are making sure that fresh and natural foods are the main part of their children's diets. When we asked women in a separate study to name the foods that they associate with a healthy child, 60% mentioned vegetables, and 56% said fruit, followed by milk, meat, and whole-grained cereals. Mothers are basing their menu planning on this ideal of the healthy child; 94.5% of the mothers whom we interviewed reported that their children eat vegetables once a day or a few times a week; 88.5% said that their children eat fresh fruit every day or a few times a week; and 82.5% said that their children eat cheese that often.

Thirty percent said that they serve cookies as an after-school snack, but 23% said that they serve fruit and 14.5% said that they serve sandwiches after school. Milk and fruit juice were the favorite after-school beverages (45% and 34% response, respectively). In contrast, only 12.5% of the mothers said that they serve *Kool-Aid* after school, and only 7.5% said that they serve soda.

Nutritional content

How do the women view the nutritional content of specific children's foods?

Sixty-seven percent think that all presweetened cereals have about the same nutritional value. More than half think that honey is more nutritious than sugar as a sweetener for cereals. Forty-seven percent agree that *Nutrasweet* would be a good replacement for sugar in presweetened cereal, 25.1% said it would not be a good replacement, and 27.4% were not sure.

Nutrition does not appear to be an important factor in the selection of cookies. When asked to name the single most important characteristic a cookie should have, almost three fourths of the women mentioned a characteristic related to taste or texture. Only 15% named "nutrition" or "a low amount of sugar" as important factors.

However, 43.5% of the women said that cookies could be improved, and many of that group suggested using fewer preservatives and additives and using less sugar.

The mothers also do not consider nutritional content when buying snack chips. Eighty-five percent said that they do not compare the nutritional content of different brands of snack chips. However, more than half said that they would give snack chips to their children *more often* if it were proven that snack chips have good nutritional value.

Brand selection

Parents are also controlling their children's diets by limiting their influence in the types of brands they select. Although 42.0% of our respondents said that their children influence their choice of cold cereal "fairly often" or "almost always," the majority said that their children *never* influence the brand selection of other favorite children's foods, such as peanut butter, corn chips, potato chips, hot dogs, nuts, or pretzels.

It appears, then, that today's parents are very concerned about their children's diets and that they are trying to limit their children's consumption of foods with problem ingredients while increasing their consumption of "natural" foods.

This trend can only be expected to grow stronger as the baby boom parents—who are demanding low-salt, low-sugar, nutritious food products for their infants and toddlers—begin to select main meals and snacks for their growing children. These parents may welcome any new children's snack that can promote either a nutritional advantage or an absence of problem ingredients.

With less time to spend on food preparation, these new parents also will demand convenient foods. In the future, nutritional microwave foods designed specifically for children's snacks or main meals may find a ready market. In fact, we have found that parents consider the microwave oven much safer for children to use than the conventional oven and that older children already are using the microwave oven to prepare their own snacks and main meals.

Finally, the new parents will want information. Because they travel more and thus can't ask questions of their own parents, these first-time parents will need information and advice about bringing up baby. Companies can establish their credibility with these parents by producing television commercials, print advertisements, and brochures that feature nutrition information and advice from the experts.

It would be a good idea to woo the new parents early with information and with wholesome, convenient, high-quality products for their young children so that they will remain loyal as their children grow older. For it is the baby boom parents who will determine the direction and the dominant products of the children's food market. It is the new parents who will shape the food preferences of their children—preferences that these large numbers of "echo boomers" will carry with them into adulthood.

Dr. Sloan is Director of the Good Housekeeping Institute, the major editorial service and technical division of Good Housekeeping magazine.

A GREAT YEAR FOR CAPITAL SPENDING

Capital spending rebounded in 1984. The top 40 food companies spent over 9% more than they did in 1983. The top ten were more lavish. Lead by Anheuser-Busch and Coca-Cola, the top ten spent 23% more.

There's nothing wrong with a little shakeup now and then. Maybe the Bluejays could make it to the World Series. Or the Buffalo Bills could hit 8-8.

Or someone could outspend Anheuser-Busch.

In what has become an annual event, Anheuser-Busch topped the capital expenditures list for 1984. It also was the top spender in 1983, 1982, 1981, 1980, and 1979. A-B spent $519.2 million last year, $393.1 million for brewing operations alone. In the last five years, $2.3 billion was spent company wide. That's nearly as much as the top ten combined.

What makes A-B more impressive is knowing the rest of the industry was hardly frugal last year. For the first time in years, capital spending rose—jumped is more appropriate. Food companies spent 9.1% more last year. In comparison, spending was down 0.2% in 1983.

In 1984, the top 40 companies spent $5.12 billion versus $4.69 billion in 1983. The top ten spent $2.92 billion last year, a huge 23.1% increase over the year before.

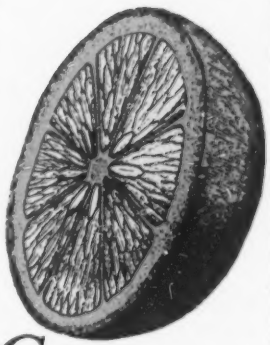
As a whole food did not spend as heavily as other industries. According to the Department of Commerce, capital spending was up an average 16% for all industries. In its survey, DOC estimates food expenditures rose 13%. The only other industry that did worse (in the nondurable goods category) was petroleum with a 10.2% increase over 1983.

Why did food companies spend more? An obvious explanation is the lower and more stable interest rate. Never over the last three years have interest rates been so dependable.

Another reason is the changing tax structure. Companies want to take advantage of known tax breaks before the law changes, if indeed it does. Department of Commerce figures support this theory. DOC did three estimates showing what spending will be like in 1985. Figures for food companies show the percentage increase to be 8.2%, 8.7%, and 9.2% over 1984. According to DOC, "The three most recent surveys suggest that some spending originally planned for the first quarter of 1985 may have been postponed. Uncertainty in the investment outlook could have prompted such a postponement. In the first quarter, corporate cash flow increased strongly and interest rates continued to decline. Real final sales of GNP were flat. Corporate profits and manufacturing capacity utilization rate also declined. Proposed changes in tax laws also contributed to the uncertain investment picture."

An interesting concentration took place in 1984. The top ten companies are expending a greater percentage of the total. Last year, the top ten spent 57.1% of the total $5.12 billion. In 1983, the top ten spent 50.6%. No doubt the mergers are an underlying cause.

So is the new products rush. Nearly all the companies listed in this year's survey used capital expenditures to support new products. Procter & Gamble is a good example. Citrus Hill Orange Juice was introduced in November, 1983, and took off in 1984. In Indiana, Iowa, and Massachusetts test markets, the total orange juice segment jumped 23% after Citrus Hill was introduced, according to P&G. Sold nationally for six months, Citrus Hill has become the second most popular national brand of frozen orange juice concentrate. That kind of



Coke introduced nine products in aseptic packages last year. Nearly $40 million was spent on aseptic production capacity.

growth needs capital.

The 1983 beverage triumvirate of A-B, Coca-Cola, and PepsiCo was broken up in 1984. CPC International's $310.6 million expenditures qualified it for third place. Nabisco's $302.8 million earned it fourth. Pepsi came in fifth with $272.5 million.

There were a few other surprises. Flowers Industries, Inc., made it to the 33rd spot. The specialty foods company had an exceptional year—sales grew 15% to $603 million, and earnings climbed at a 15% compounded annual rate. Quaker Oats reappeared as a top spender after dropping off the ranking in 1983. And Ocean Spray made the 31st spot.

Who spent what

What did Anheuser-Busch get for its $510.2 million? Several areas of the Houston, Tex., brewery were expanded in anticipation of sales growth. When complete, the project will add about 5 million barrels, bringing A-B's total capacity to 75 million barrels. It sold an industry-leading 64 million barrels in 1984. Site work began on a plant in Fort Collins, Col. The final decision will depend on the market. Over $100 mil. was spent to modernize other breweries.

Coke leaned heavily on aseptic production. It spent $40 million on lines for various *Minute Maid* flavors as well as *Hi-C* and *Five-Alive*. That's on top of the $20 million Coke poured into aseptic equipment in 1983.

CPC International continued to increase its HFCS production capacity. The Argo, Il., plant was completed, and expansion continued at other facilities. Around $350 million will be spent by the end of 1985.

Nabisco built a $42 million research center in New Jersey. It also introduced a host of new products in 1984—again, products that required support in terms of new technology and equipment. These include: *Oreo "Big Stuf"* Cookies, (giant three-inch cookies); *Chewy Chips Ahoy!* cookies; the *Almost Home* cookies line; *Easy Cheese*, a new name and package for *Snack Mate* pasteurized cheese; Luscious Lime and Bananaberry Split flavors for *Bubble Yum* chewing gum (made with a new coextrusion process); *Bonkers!* fruit candy; and *Fleischmann's Squeeze* liquid margarine.

Finally, PepsiCo opened its ultra-modern Casa Grande, Az., plant for Frito-Lay products. "Ultra-modern" is not overworked in this case. The 112,000 sq. ft. plant can churn out nearly 27 million lbs. of potato, corn, and tortilla chips per year. Pepsi also continued with its quality assurance program, installing over 300 checkweighers at Frito-Lay plants. In packaging, it introduced the three-liter PET bottle, and continued improving *Slice* bottling operations.

TOP 40 SPENDERS

Company	1980	1981	1982	1983	1984
Anheuser-Busch	1	1	1	1	1
Coca-Cola	4	3	6	2	2
CPC International	5	5	8	7	3
Nabisco Brands	17	8	5	5	4
PepsiCo	2	7	4	3	5
General Foods	6	10	7	4	6
R.J. Reynolds	18	21	17	6	7
Procter & Gamble	21	30	19	28	8
Kellogg's	12	14	15	10	9
Beatrice	8	11	9	17	10
Campbell Soup	10	16	12	8	11
Nestle	--	--	22	16	12
Archer-Daniels-Midland	7	2	11	13	13
Adolph Coors	14	13	25	11	14
H.J. Heinz	16	17	20	14	15
Dart & Kraft	11	18	16	21	16
General Mills	22	19	14	15	17
Hershey Foods	28	20	18	20	18
Philip Morris	3	4	3	9	19
Borden	27	29	30	22	20
Consolidated Foods	9	12	13	23	21
Pillsbury	32	28	29	24	22
Quaker Oats	25	15	24	--	23
Seagram	26	24	23	25	24
The Federal Co.	39	46	--	30	25
ConAgra	42	38	45	12	26
A.E. Staley	19	6	2	29	27
Agway	--	--	--	31	28
IC Industries	41	34	33	33	29
Ralston Purina	20	9	10	26	30
Ocean Spray	--	--	--	--	31
G. Heileman	37	35	49	34	32
Flowers	--	--	32	--	33
Tyson Foods	--	43	43	49	34
Lipton	--	--	--	47	35
Central Soya	--	39	40	46	36
American Brands	--	--	41	38	37
Castle & Cooke	40	40	50	40	38
General Cinema	--	--	36	35	39
United Brands	--	--	41	38	40

1 Anheuser-Busch St. Louis, Mo

	1984	1983	% Change
Capital Expenditures	519.2	346.2	50.0
Net Sales	6,501	6,034	7.7
Net Earnings	391.5	346.2	13.1
Estimated 1985 Spending: $550 million			

Continued expansion of the Houston brewery scheduled to add five million barrels to capacity. Modernization projects totaling $100 million are underway at Newark, NJ., plant and St. Louis brewery. Site work began on Fort Collins, Col., brewery, and will progress depending on sales.

2 Coca-Cola Atlanta, GA

	1984	1983	% Change
Capital Expenditures	334.5	282.7	18.3
Net Sales	6,479	5,980	8.3
Net Earnings	553	511.5	8.1
Estimated 1985 Spending: NA			

Spent nearly $40 million on aseptic production of Minute Maid juices and new flavors of Hi-C and Five Alive. Packaging took high priority in other areas as well. Bag-in-box, non-returnable fountain syrup packaging systems were adapted for food service.

3 CPC International Englewood Cliffs, NJ

	1984	1983	% Change
Capital Expenditures	310.6	187.4	65.7
Net Sales	4,373	4,011	9.1
Net Earnings	193.4	136.2	42
Estimated 1985 Spending: over $300 million			

Over $180 million spent to improve corn wet milling operations. The Argo, Ill plant was completed. Work began on a second European wheat processing facility in Sas van Gent, the Netherlands. A 50% expansion was completed at the Winston-Salem, NC plant.

4 Nabisco Brands New York, NY

	1984	1983	% Change
Capital Expenditures	302.8	240.9	25.7
Net Sales	6,253	5,985	4.5
Net Earnings	308.9	322.6	−4.2
Estimated 1985 Spending: $300 million			

Construction continued on $42 million research center in New Jersey. Three-year modernization program began at Franklin Park, IL., candy bar facility.

5 PepsiCo Purchase, NY

	1984	1983	% Change
Capital Expenditures	272.5	273.9	−0.51
Net Sales	5,618	5,370	4.6
Net Earnings	155.1	212.9	−27
Estimated 1985 Spending: NA			

Frito-Lay's Casa Grande, Az plant opening in August, 1984, the fastest start-up of any Frito-Lay plant. Roughly 300 checkweighers were added companywide. O'Gradys potato chips were rolled out nationally and hit $100 million in sales.

6 General Foods White Plains, NY

	1984	1983	% Change
Capital Expenditures	266.7	266.1	0.22
Net Sales	8,600	8,256	4.2
Net Earnings	317.1	288.5	9.9
Estimated 1985 Spending: Same as 1984			

Investment continued in technology for Maxwell House Coffee Division, especially for the decaffeination process. New packaging lines include vacuum-pack brick for Master Blend and a foil package for Bird's Eye vegetables.

7 R.J. Reynolds Winston-Salem, NC

	1984	1983	% Change
Capital Expenditures	246	206	19.4
Net Sales	4,698	4,491	4.6
Net Earnings	391	334.6	17.1
Estimated 1985 Spending: Around $90 million over three years			

Continued program to upgrade Kentucky fried Chicken restaurants, Del Monte facilities, and Heublein plants. Heublein will build a pilot plant to expedite new product introductions. Future expenditures will include improvements to the newly acquired Canada Dry plants.

8 Procter & Gamble Cincinnati, OH

	1984	1983	% Change
Capital Expenditures	234	116	101.7
Net Sales	2,416	2,249	7.4
Net Earnings	91	117	−178
Estimated 1985 Spending: Somewhat higher			

Capital projects supported new products. Duncan Hines Chocolate Chip Cookies and Citrus Hill Orange Juice both required market and capital funding. Citrus Hill became the second most popular brand in six months. Note--earnings are before taxes.

9 Kellogg Battle Creek, MI

	1984	1983	% Change
Capital Expenditures	228.9	156.7	46.0
Net Sales	2,602	2,381	9.3
Net Earnings	250.5	242.7	3.2
Estimated 1985 Spending: NA			

Buildings completed and equipment installed for Project 2000, an advanced cereal technology plant in London, Ont. Expansion began at the Lancaster, Pa., cereal plant. Improvement plan began at Mrs. Smith's Frozen Foods in Pottstown, Pa. New plant purchased in Elma, NY for yogurt.

10 Beatrice Foods Chicago, IL

	1984	1983	% Change
Capital Expenditures	208	211	−1.4
Net Sales	7,304	7,216	1.2
Net Earnings	545	537	1.5
Estimated 1985 Spending: Expected to increase			

Capital expenditures went toward upgrading facilities and improving operations.

CPC International spent over $300 million to meet rising demand for high fructose corn syrup. It will do the same in 1985.

H.J. Heinz increased capital spending by 16%. The Fremont, Ohio plant was expanded by 32,000 sq. ft., for three #10 ketchup pouch-filling machines.

11 Campbell Soup Camden, NJ

	1984	1983	% Change
Capital Expenditures	183	154	18.8
Net Sales	3,657	3,292	11.1
Net Earnings	191.2	165.0	15.9
Estimated 1985 Spending: $165 million (Campbell, US.)			

Completed the $8 million Dublin, GA., mushroom growing plant. Added a $9 million LeMenu production line at the Sumter, SC plant. Built a new Plastics Research Center in Moorestowe, NJ for plastic containers.

12 Nestle' White Plains, NY

	1984	1983	% Change
Capital Expenditures	175.7	122.5	43.4
Net Sales	3,116	2,508	24.2
Net Earnings	149.5	113.2	32.1
Estimated 1985 Spending: NA			

Expenditures went for new plant construction including Stouffer's plant in Gaffney for frozen foods and a chocolate/confectionery plant in Fulton.

13 ADM Decatur, IL

	1984	1983	% Change
Capital Expenditures	150.5	147.7	1.9
Net Sales	4,907	4,292	14.3
Net Earnings	117.7	110.2	6.8
Estimated 1985 Spending: NA			

Expanded capacity without adding new plants through technology. Completed expansion at Lincoln, NE., and began energy conservation projects at Augusta, GE., Kershaw, SC., Fremont, NE., Little Rock, Ark., Clarksdale, MS., and Galesburg, Il.

14 Adolph Coors Golden, CO

	1984	1983	% Change
Capital Expenditures	138.8	155.7	−10.9
Net Sales	1,133	1,110	2.1
Net Earnings	44.7	89.3	−49.9
Estimated 1985 Spending: $110 million			

Completed a $70 million European style malthouse. Its circular shape makes it energy efficient and allows greater automation. Added a 420 keg per hour packaging line. Opened the Golden Recycle Company in Col., to produce 400,000 lbs of coil stock per week from used aluminum cans.

15 H.J. Heinz Pittsburgh, PA

	1984	1983	% Change
Capital Expenditures	137.0	111.4	22.9
Net Sales	3,934	3,738	5.2
Net Earnings	237.5	214.3	10.8
Estimated 1985 Spending: NA			

A high-speed line was installed at the Fremont, OH., plant to triple capacity of 3-gallon metallized ketchup bags for food service. Also added filling and packaging lines for squeezable ketchup and barbeque sauce bottles. Completed first phase of Burly, Ind., facility.

16 Dart & Kraft Glenview, IL

	1984	1983	% Change
Capital Expenditures	107.9	95.3	13.2
Net Sales	6,838	6,660	2.7
Net Earnings	319.5	252.8	26.4
Estimated 1985 Spending: NA			

Capital expeditures made in the following ratio: 66% for improving efficiency and facility replacement, 33% for expansion. Increased production capacity for fast-selling Light n' Lively lowfat yogurt.

17 General Mills Minneapolis, MN

	1984	1983	% Change
Capital Expenditures	103.2	130.3	−20.8
Net Sales	2,771	2,713	2.1
Net Earnings	47.1	130.7	−136.0
Estimated 1985 Spending: $250 million (company wide)			

Earnings reflect a major restructuring program. Two divisions, Consumer Foods and Restaurants, now make up 90% of the company. Expenditures next year will go toward expanding the capacity of the Consumer Foods division.

18 Hershey Foods Hershey, PA

	1984	1983	% Change
Capital Expenditures	87.1	105.3	−17.3
Net Sales	1,893	1,706	11.0%
Net Earnings	108.7	100.2	8.5
Estimated 1985 Spending: About the same			

Installed a new line to make Reese's Peanut Butter Chips. Improved the production capacity of Hershey's Miniatures and Kisses.

19 Philip Morris New York, NY

	1984	1983	% Change
Capital Expenditures	79.0	155.9	−49.3
Net Sales	3,662	3,572	2.5
Net Earnings	235.6	248.7	5.3
Estimated 1985 Spending: NA			

Modernized processing facilities. Installed bottling equipment to handle the King Kan for Miller Beer. Also installed support equipment for the three-liter PET bottle for Seven-Up.

20 Borden New York, NY

	1984	1983	% Change
Capital Expenditures	78.4	94.6	−17.1
Net Sales	3,120	2,969	5.1
Net Earnings	130.6	131.7	−0.83
Estimated 1985 Spending: NA			

Packaging updated on several products, including Bama Jams and Jellies and Frostal aseptically packaged flavored drinks. Metzger Dairy, Dallas, Tx., modernized and expanded. New ice cream plant under construction in Houston. Four major potato chip processing projects underway.

21 Consolidated Foods Chicago, IL

	1984	1983	% Change
Capital Expenditures	76.2	113.8	−33.0
Net Sales	3,336	3,186	4.7
Net Earnings	89.6	82.9	8.1
Estimated 1985 Spending: NA			

Acquisitons include Jimmy Dean Meat Company in Dallas, the Buring Food Group in Memphis, Tenn., Poultry Specialties, Peck Red Meat Packing, and a processing facility in Los Angeles.

22 Pillsbury Minneapolis, MN

	1984	1983	% Change
Capital Expenditures	73.2	69.6	5.2
Net Sales	2,489	2,280	9.2
Net Earnings	101.3	85.9	17.9
Estimated 1985 Spending: $88 million			

A Haagen-Dazs ice cream plant is under construction in Tulore, Cal. New Toaster Strudel and Milk Break production lines were installed. A vegetable processing plant is underway in Mexico as well.

23 Quaker Oats Chicago, IL

	1984	1983	% Change
Capital Expenditures	71.1	94.2	−24.5
Net Sales	2,758	2,561	7.7
Net Earnings	122.7	106.2	15.5
Estimated 1985 Spending: NA			

Quaker used capital expenditures to improve and modernize plant operations

24 Seagram Montreal, Canada

	1984	1983	% Change
Capital Expenditures	68.3	90.2	−24.3
Net Sales	2,648	2,826	− 6.3
Net Earnings	119.4	113	5.7
Estimated 1985 Spending: NA			

Began testing an EDI system in its distribution system. Distillers place orders directly to seagram via a hand-held computer terminal carried by salesmen.

25 The Federal Co. Memphis, TN

	1984	1983	% Change
Capital Expenditures	61.6	51.4	19.8
Net Sales	1,282	1,304	− 1.7
Net Earnings	35.6	41.4	−13.4
Estimated 1985 Spending: $40 million			

Replaced vehicles at all plants. Acquired three protein blending plants. Added $6.5 million worth of production and frozen storage space to Holly Farms. Modernized and installed a new grain elevator at Dixie Portland's Barnesville, Ga flour mill.

26 ConAgra Minneapolis, MN

	1984	1983	% Change
Capital Expenditures	56.6	112.7	−49.8
Net Sales	3,568	1,432	149.2
Net Earnings	59.5	28.7	108.7
Estimated 1985 Spending: NA			

Outlays were made to add volume, increase capacity, and support dozens of new products including: 31 new or retaged banquet entrees; Light & Elegant premium entrees, Armour's Classic Lite line, and Country Skillet Catfish products.

27 A.E. Staley Decatur, IL

	1984	1983	% Change
Capital Expenditures	54.6	50.4	8.3
Net Sales	2,140	1,679	27.5
Net Earnings	36.6	13.7	167
Estimated 1985 Spending: NA			

Finished expansion of the Loudon, Tn., plant, which will add 200 million pounds to HFCS capacity. Morrisville added roll dryer capacity for starches. Modernization continued to the Decatur starch production process.

28 Agway Syracuse, NY

	1984	1983	% Change
Capital Expenditures	48.4	37.9	27.7
Net Sales	1,736	1,677	3.5
Net Earnings	11.8	9.7	21.6
Estimated 1985 Spending: $23.3 million			

H.P. Hood neared completion with its largest dairy processing facility in Charlestown, Ma. A 2½ year R&D and processing equipment program to develop a long shelf life shake and sundae mix was completed and is fulfilling volume and profit expectations.

29 IC Industries Chicago, IL

	1984	1983	% Change
Capital Expenditures	45.4	36.6	24.0
Net Sales	1,561	1,542	1.2
Net Earnings	45.4	34.3	32.4
Estimated 1985 Spending: $47 million			

Completed a $7 million automated equipment installation at Whitman's candy plant, the first phase of a $21 million program. Full production was reached at the Allentown, PA waffle plant. Productivity went up for the fifth consecutive year.

30 Ralston Purina St. Louis, MO

	1984	1983	% Change
Capital Expenditures	40.4	31.2	29.5
Net Sales	1,887	1,862	1.3
Net Earnings	92.3	97.8	− 5.6
Estimated 1985 Spending: $74 million			

Investments will increase dramatically in 1985 as improvements are made to Continental Baking Co. Support for new products include equipment for Rainbow Brite cereal and Ralston S'mores Chewy Granola Bars.

General Foods increased its spending by 14% to $302.9 million. Over the last five years, GF has spent $1.3 billion.

*E*xpenditures totaled $107.9 million for Dart & Kraft, an increase of 13.2%. Production capacity for Light n' Lively yogurt increased to match a 40% jump in sales volume.

31 Ocean Spray Plymouth, MA

	1984	1983	% Change
Capital Expenditures	40.4	21.4	88.8
Net Sales	457.0	409.6	11.6
Net Earnings	2.32	1.88	18.9
Estimated 1985 Spending: will increase			

Four major projects: new cranberry receiving station in Warrens, Wis.; processing system installed at Middleborough, Mass.; new freeze concentrator at Vero Beach, Fla.; and two flexible packaging lines & aseptic systems at Kenosha, Wis.

32 G. Heileman La Cross, WI

	1984	1983	% Change
Capital Expenditures	39.6	33.8	17.2
Net Sales	1,342	1,326	1.2
Net Earnings	45.8	57.0	—19.6
Estimated 1985 Spending: Substantially less			

Completed a $4.2 million expansion of waste water purification plant. The system produces methane gas as a by-product. Other projects increased productivity 87% in 1984.

33 Flowers Ind. Thomasville, GA

	1984	1983	% Change
Capital Expenditures	37.5	30.1	24.6
Net Sales	603.0	522.3	15.5
Net Earnings	22.1	19.2	15.1
Estimated 1985 Spending: NA			

Over $122 million has been invested in capital expeditures over the last five years by this Fortune 500 company (ranked 446 by sales, 23rd by return to investors) to modernized its 13 plants.

34 Tyson Foods Oklahoma City, OK

	1984	1983	% Change
Capital Expenditures	36.4	19.8	83.8
Net Sales	750.1	603.5	24.4
Net Earnings	18.2	11.1	64.0
Estimated 1985 Spending: Will increase			

Continued to expand plants and modernize. Acquired mexican Original Products, Fayetteville, Ark., a maker of authentic Mexican tortillas, taco shells, tostadas, and tortilla chips.

35 Lipton Englewood Cliffs, NJ

	1984	1983	% Change
Capital Expenditures	35.7	22.2	60.8
Net Sales	1,138	1,006	13.1
Net Earnings	71.0	64.5	10.1
Estimated 1985 Spending: NA			

Continued to work on computerization of key production facilities to insure high product quality.

36 Central Soya Fort Wayne, IN

	1984	1983	% Change
Capital Expenditures	35.6	23.4	52.1
Net Sales	1,728	1,513	14.2
Net Earnings	21.9	25.2	—13.1
Estimated 1985 Spending: NA			

Completed expansion of the Decatur, Ill. shortening plant. Added edible oil refining capacity to the Bellevue, Ohio plant.

37 American Brands New York, NY

	1984	1983	% Change
Capital Expenditures	34.8	28.9	20.4
Net Sales	740.2	720.5	27.3
Net Earnings	43.8	41.3	6.1
Estimated 1985 Spending: $33.9 million			

Equipment to handle several new products, including: Sunshine American Heritage line of crackers; Chips'n middles cookies; and Squiggles, a promising potato-based snack.

38 Castle & Cooke Honolulu, HA

	1984	1983	% Change
Capital Expenditures	34.0	27.1	25.5
Net Sales	1,521	1,362	11.7
Net Earnings	76.7	49.7	—254.3
Estimated 1985 Spending: $34 million			

C&C merged into Flex-Van Corp., a transportation leasing company on March 12, 1985. Capital expeditures will be used to upgrade production equipment.

39 General Cinema Chestnut Hill, MA

	1984	1983	% Change
Capital Expenditures	32.7	32.5	0.6
Net Sales	512.7	473.1	8.4
Net Earnings	66.7	63.1	5.7
Estimated 1985 Spending: Small increase			

Improved plant efficiency and operations. Heavy commitment was made to upgrading vending. Sold over four billion individual servings last year.

40 United Brands New York, NY

	1984	1983	% Change
Capital Expenditures	31.5	19.2	64.1
Net Sales	3,155	2,277	38.6
Net Earnings	43.4	158.2	127.6
Estimated 1985 Spending: NA			

Opened new dehydrated soup plant in Costa Rica. pioneered a container service to ship 50% more Chiquita bananas per week. Continued palm oil projects.